



10/722375

PATENT

Cgc

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : 7,310,574
Issue Date : December 18, 2007
Inventor : Eusebio Di Cola et al.

Docket No. : 856063.757
Date : April 27, 2009

Mail Stop Certificate of Correction
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certificate
MAY 05 2009
of Correction

REQUEST FOR CERTIFICATE OF CORRECTION

Commissioner for Patents:

A certificate of correction is respectfully requested in the above-identified patent.
The following errors have been made:

In column 25, claim 17, lines 15-56, the table reciting

“ ”

start	Starts the state machine implemented in “cams_shaft”
Stop	Stops the state machine implemented in “cams_shaft” and brings it back to its initial state ready to start again.
mem_cam_changes1	Table of <i>size1</i> items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur on the cam signal during the drive shaft rotation corresponding to phase zero.
profile1	Indicates the expected value of the cam profile stored in <i>mem_cam_changes1</i> .
size1	Indicates the number of items stored in the <i>mem_cam_changes1</i> and <i>profile1</i> tables.
mem_cam_changes2	Table of <i>size1</i> items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur on the cam signal during the drive shaft rotation corresponding to phase one.

profile2	Indicates the expected value of the cam profile stored in <i>mem_cam_changes2</i> .
size2	Indicates the number of items stored in the <i>mem_cam_changes2</i> and <i>profile2</i> tables.
mem_cam_r	Table of <i>sizer</i> items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur for the reconstructed cam signal.
Profiler	Indicates the expected value of the cam profile stored in <i>mem_cam_r</i> .
Sizer	Indicates the number of items stored in the <i>mem_cam_r</i> and <i>profiler1</i> tables.
Delta	Indicates the width of the interval around the time point when the system is expecting a tooth of the camshaft phonic wheel.
offset_out	Indicates the extent that the cam signal has to be shifted from the drive shaft phonic wheel signal.
a_ns	Indicates whether the shift has to occur in the forward or the backward direction.
cfg_phase	Indicates if the teeth counter of the drive shaft phonic wheel has to be shifted.
error_at	Indicates the number of the tooth where the last error occurred.
teeth_cnt	Indicates the drive shaft angular position as phonic wheel teeth counter from 1 to $2^* (n_tooth_holes)$.
cam_phase	Indicates the motor phase.
lock_cam	Indicates that the motor operating phase is found.
stato_out	Indicates the current state of the "cams_shaft" state machine.
rec_out	Desired camshaft profile.

is erroneous and instead should read as

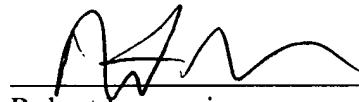
start	Starts the state machine implemented in "cams_shaft"
Stop	Stops the state machine implemented in "cams_shaft" and brings it back to its initial state ready to start again.

mem_cam_changes1	Table of <i>size1</i> items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur on the cam signal during the drive shaft rotation corresponding to phase zero.
profile1	Indicates the expected value of the cam profile stored in <i>mem_cam_changes1</i> .
size1	Indicates the number of items stored in the <i>mem_cam_changes1</i> and <i>profile1</i> tables.
mem_cam_changes2	Table of <i>size1</i> items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur on the cam signal during the drive shaft rotation corresponding to phase one.
profile2	Indicates the expected value of the cam profile stored in <i>mem_cam_changes2</i> .
size2	Indicates the number of items stored in the <i>mem_cam_changes2</i> and <i>profile2</i> tables.
mem_cam_r	Table of <i>sizer</i> items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur for the reconstructed cam signal.
Profiler	Indicates the expected value of the cam profile stored in <i>mem_cam_r</i> .
Sizer	Indicates the number of items stored in the <i>mem_cam_r</i> and <i>profiler1</i> tables.
Delta	Indicates the width of the interval around the time point when the system is expecting a tooth of the camshaft phonic wheel.
offset_out	Indicates the extent that the cam signal has to be shifted from the drive shaft phonic wheel signal.
a_ns	Indicates whether the shift has to occur in the forward or the backward direction.
cfg_phase	Indicates if the teeth counter of the drive shaft phonic wheel has to be shifted.

pursuant to the amendment of July 25, 2007.

Attached is the certificate of correction, which indicates the corrections to be made, by reference to the category and page number in the printed patent. Because the errors were made by the Patent Office, no fee is necessary. However, if they are determined to be our errors, the Director is hereby authorized to charge payment of any fees associated with this communication only to Deposit Account No. 19-1090.

Respectfully submitted,
SEED Intellectual Property Law Group PLLC



Robert Iannucci
Registration No. 33,514

RXI:at

Enclosures:

Certificate of Correction
Postcard

SEED Intellectual Property Law Group PLLC
701 Fifth Avenue, Suite 5400
Seattle, Washington 98104-7092
Phone: (206) 622-4900
Fax: (206) 682-6031

1362562_1.DOC

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO : 7,310,574 B2
DATED : December 18, 2007
INVENTOR : Eusebio Di Cola et al.

It is certified that an error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 25

Lines 15-56,

start	Starts the state machine implemented in "cams_shaft"
Stop	Stops the state machine implemented in "cams_shaft" and brings it back to its initial state ready to start again.
mem_cam_changes1	Table of size1 items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur on the cam signal during the drive shaft rotation corresponding to phase zero.
profile1	Indicates the expected value of the cam profile stored in <i>mem_cam_changes1</i> .
size1	Indicates the number of items stored in the <i>mem_cam_changes1</i> and <i>profile1</i> tables.
mem_cam_changes2	Table of size1 items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur on the cam signal during the drive shaft rotation corresponding to phase one.
profile2	Indicates the expected value of the cam profile stored in <i>mem_cam_changes2</i> .
size2	Indicates the number of items stored in the <i>mem_cam_changes2</i> and <i>profile2</i> tables.
mem_cam_r	Table of size1 items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur for the reconstructed cam signal.
Profiler	Indicates the expected value of the cam profile stored in <i>mem_cam_r</i> .
Sizer	Indicates the number of items stored in the <i>mem_cam_r</i> and <i>profiler1</i> tables.
Delta	Indicates the width of the interval around the time point when the system is expecting a tooth of the camshaft phonic wheel.
offset_out	Indicates the extent that the cam signal has to be shifted from the drive shaft phonic wheel signal.
a_ns	Indicates whether the shift has to occur in the forward or the backward direction.
cfg_phase	Indicates if the teeth counter of the drive shaft phonic wheel has to be shifted.
error_at	Indicates the number of the tooth where the last error occurred.
teeth_cnt	Indicates the drive shaft angular position as phonic wheel teeth counter from 1 to 2* (n_tooth_holes).
cam_phase	Indicates the motor phase.
lock_cam	Indicates that the motor operating phase is found.
stato_out	Indicates the current state of the "cams_shaft" state machine.
rec_out	Desired camshaft profile.

(continued on p. 2 of Certificate of Correction)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO : 7,310,574 B2
DATED : December 18, 2007
INVENTOR : Eusebio Di Cola et al.

It is certified that an error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

should read as

start	Starts the state machine implemented in "cams_shft"
Stop	Stops the state machine implemented in "cams_shft" and brings it back to its initial state ready to start again.
mem_cam_changes1	Table of size1 items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur on the cam signal during the drive shaft rotation corresponding to phase zero.
profile1	Indicates the expected value of the cam profile stored in <i>mem_cam_changes1</i> .
size1	Indicates the number of items stored in the <i>mem_cam_changes1</i> and <i>profile1</i> tables.
mem_cam_changes2	Table of size1 items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur on the cam signal during the drive shaft rotation corresponding to phase one.
profile2	Indicates the expected value of the cam profile stored in <i>mem_cam_changes2</i> .
size2	Indicates the number of items stored in the <i>mem_cam_changes2</i> and <i>profile2</i> tables.
mem_cam_r	Table of size1 items, containing the number-of-tooth values of the drive shaft phonic wheel where transitions occur for the reconstructed cam signal.
Profiler	Indicates the expected value of the cam profile stored in <i>mem_cam_r</i> .
Sizer	Indicates the number of items stored in the <i>mem_cam_r</i> and <i>profiler1</i> tables.
Delta	Indicates the width of the interval around the time point when the system is expecting a tooth of the camshaft phonic wheel.
offset_out	Indicates the extent that the cam signal has to be shifted from the drive shaft phonic wheel signal.
a_ns	Indicates whether the shift has to occur in the forward or the backward direction.
cfg_phase	Indicates if the teeth counter of the drive shaft phonic wheel has to be shifted.

MAILING ADDRESS OF SENDER:

Robert Iannucci
Seed Intellectual Property Law Group PLLC
701 Fifth Avenue, Suite 5400
Seattle, Washington 98104

PATENT NO. 7,310,574 B2

No. of additional copies

0

Burden hour Statement: This form is estimated to take 1.0 hour to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.